

SOUTHERN CALIFORNIA



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**Ventura County Transportation Commission:** Keith Milhouse, Montpark

## MEETING OF THE

# MAGLEV TASK FORCE

**Thursday, May 10, 2007**

**10:00 a.m. – 12:00 p.m.**

## SCAG Offices

**818 W. 7<sup>th</sup> Street, 12<sup>th</sup> Floor**

**Conference Room Riverside B**

**Los Angeles, California 90017**

**213. 236.1800**

## VIDEO CONFERENCE LOCATION:

SCAG Inland Empire Office

3600 Lime Street, Suite 216

Riverside, CA 92501

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If members of the public wish to review the attachments or have any questions on any of the agenda items, please contact Richard Marcus at 213.236.1819 or [marcus@scag.ca.gov](mailto:marcus@scag.ca.gov).

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# MAGLEV TASK FORCE

## AGENDA

PAGE #

TIME

*"Any item listed on the agenda (action or information) may be acted upon at the discretion of the Committee".*

1. **CALL TO ORDER AND INTRODUCTIONS**      Hon. Lou Bone, Chair

2. **PUBLIC COMMENT PERIOD**

Members of the public desiring to speak on an agenda item or items not on the agenda, but within the purview of the Committee, must fill out and present a speaker's card to the assistant prior to speaking. A speaker's card must be turned in before the meeting is called to order. Comments will be limited to three minutes. The chair may limit the total time for all comments to twenty (20) minutes.

3. **CONSENT CALENDAR**

3.1 Approval Items

3.1.1 Minutes of the April 12, 2007 Meeting  
**Attachment**

1

4. **INFORMATION ITEMS**

- |   |   |        |
|---|---|--------|
| 4.1 High-Speed Regional Transport Business Plan         | David Chow, IBI Group                                   | 60 min |
| 4.2 West Los Angeles Multi-Modal Transit Facility Study | Frank Sherkow, Southstar Engineering & Consulting, Inc. | 30 min |

5. **OPEN DISCUSSION**

6. **CHAIR'S REPORT**

7. **NEXT MEETING**

The next meeting of the Maglev Task Force will be held on Thursday, June 14, 2007 at the SCAG offices in downtown Los Angeles.

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MAGLEV Task Force  
of the  
Southern California Association of Governments

April 12, 2007

*Minutes*

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**THE FOLLOWING MINUTES ARE A SUMMARY OF ACTIONS TAKEN BY THE MAGLEV TASK FORCE. AUDIO CASSETTE TAPE OF THE ACTUAL MEETING IS AVAILABLE FOR LISTENING IN SCAG'S LOS ANGELES OFFICE.**

The Maglev Task Force held its meeting at the SCAG Headquarters in Los Angeles. The meeting was called to order by Hon. Lou Bone, Chair, City of Tustin. There was a quorum.

**Members Present:**

Hon. Lou Bone, Chair	City of Tustin
Rick Deming	Caltrans – Division of Rail
James McCarthy	Caltrans – District 7
Hon. Gene Daniels	City of Paramount
Hon. Chris Barnes	City of La Palma
Dr. Ronald Bates	City of La Habra Heights
Hon. Greig Smith	City of Los Angeles

**Audience Attendees:**

Reed Tanger	Transrapid International – USA
Frank Sherkow	Shouthstar Engineering & Consulting, Inc.
Aileen Kenney	Caltrans – District 12
Charles Lau	Caltrans – District 7
Phyllis Winger	Office of Councilman Greig Smith, City of L.A.
Arthur Black	LSA Associates
Jose Martinez	High Speed Rail Authority, Cordoba Corporation
Roberto Ramirez	Cordoba Corporation
Lillian Yan	HNTB
David Bilow	Portland Cement Association
Mike Simon	General Atomics
Jessica Hardin	General Atomics
Danny Wu	City of Anaheim
Greg Nord	Orange County Transportation Authority
David Chow	IBI Group
Bart Reed	Transit Coalition
Sharad Mulchand	Los Angeles County Metropolitan Transportation Authority

**Video Conference:**

Hon. Alan D. Wapner, Vice Chair	City of Ontario
Tom Dana	City of Ontario

**SCAG Staff:**

Richard Marcus	Jessica Meaney
Akiko Yamagami	Alan Thompson
Mikaela Randolph	André Darmanin

1. **CALL TO ORDER AND INTRODUCTIONS**

Hon. Lou Bone, Chair called the meeting to order at 10:05 am.

2. **PUBLIC COMMENT PERIOD**

There were no public comments.

3. **CONSENT CALENDAR**

3.1 **Approval Items**

3.1.1 **Minutes of February 8, 2007 Task Force Meeting**

*Motion was moved (Barnes), seconded (Bates), and unanimously approved.*

4. **INFORMATION ITEMS**

4.1 **Initial Operating Segment JPA**

Hon. Lou Bone, Chair requested that Hon. Alan Wapner, City of Ontario and Hon. Greig Smith, City of Los Angeles brief the task force on the status of the Joint Powers Authority (JPA) agreement. Hon. Greig Smith updated the task force on a meeting that took place last month between representatives of the City of Ontario, City of Los Angeles, SCAG, and SANBAG to discuss the details of the JPA. Representatives from the City of West Covina were unable to participate. An agreement was reached on the general terms of the JPA with a final draft to be available for review and distribution sometime next week. Comments, changes, and approvals are expected to be received early in the month and finalization is expected by June 2007. Hon. Alan Wapner added that the meeting was a success and is looking forward to receiving the draft from the City of Los Angeles.

4.2 **LAX-South Corridor**

Frank Sherkow, Southstar Engineering, provided members with a presentation on the corridors studied by SCAG during the initial Maglev phases of work. Initially, a variety of options were looked at coming out of the LAX area and going into Orange County. These alignments would serve the following roles: airport connector which concentrated on linking three airports, activity center connector which included the Anaheim resort community and multi-modal connector which focused on integrating the system with other transit and train systems in the metro area.

The focus points on the southern alignment are:

- Best overall performance with least competition (from Orange Line, Metrolink, and others)
- High number of stations with development potential
- Fewer environmental impacts
- Best fulfills role of airport connector

Hon. Bates, City of La Habra Heights added that the system should include a fifth and equally important role in that it would have a positive impact in relieving traffic congestion for commuters along the 405 freeway.

Mr. Sherkow presented members with an overview of the four alignment options. The alignment would include station stops at LAX, Union Station, City of Carson, the City of Long Beach, the City of Seal Beach, the City of Huntington Beach, John Wayne Airport, the City of Anaheim, the City of Santa Ana, and the City of Irvine. Hon Bates stated that the Initial Operating Segment (IOS) should be coterminous with the station that would be connected with the southern alignment. Richard Marcus, SCAG noted that the planning does consider interconnectivity with LAX. The idea is for the IOS to one day go into LAX.

The option that was recommended by the task force and the regional council allowed for connections at the City of Anaheim and the Irvine Transportation Center. This system would be built in segments for financing purposes and provided many connectivity options. Additional favorable recommendations include highest ridership, lowest cost per mile, greatest flexibility, and ability to provide linkage for airports and linkage to the Ontario airport area. The fare structure was in 2000 dollars and was eleven dollars for a one-way trip. Some assumptions were made regarding the amount of revenue from cargo and station revenues, parking and advertising and concessions.

Several challenges have arisen in the last few years that may impact the LAX-South Corridor. They are:

- Lack of political/institutional interest
- Construction costs have increased sharply
- Difficulties in getting to Anaheim and Santa Ana due to limited rights-of-way
- Limited rights-of-way along the 1-405
- Uncertainty about the interest of the three airports along the corridor (LAX, Long Beach, and John Wayne) to connect to the route.

The item concluded with a brief discussion of mode choice technology.

#### 4.3 Construction Challenges of a Maglev/High-Speed Rail System

David Billow, Portland Cement Association, began by presenting the Task Force with background history of the organization and the California Concrete Industry.

Mr. Billow reported the following quantities for the SCAG Maglev IOS considering concrete construction over a four year period:

- Concrete needed – one-quarter million cubic yards per year
- 2007 Ready mixed concrete production – 50 million cubic yards
- Cement for SCAG IOS – 70,000 tons
- 2006 Cement production – 14 million tons

Slides were presented showing the different types of concrete beams for various size spans. In addition to the beams, Mr. Billow's presentation used the Washington, DC Metro Shared Corridor as an example to demonstrate the methods of segmented girder construction and prestressed girder erection. In segmental girder construction, segments can span five hundred feet weighing forty tons per segment wherein prestressed girder beams span one hundred and seventy feet and weigh between eighty to one hundred and seventy tons.

The JFK AirTrain project in New York served as an example to the construction methods of a Maglev system. The AirTrain project is a nine mile long aerial structure that contains a dual track placed side by side with a total width of 31 feet. The beams were constructed using the segmental construction method and is located in the center of the Van Wick Expressway.

Mr. Billow also provided examples of concrete bridges in the United States and in Vancouver, BC, Canada and Elbe River Water Bridge in Germany.

Concrete magways or railways constructed by the Portland Cement Association include the TVE Test Facility in Emsland, Germany and the Magway in Shanghai, China. The TVE Test Facility included a test track that is 31.5 km long and 2/3 of its girders are concrete. Although adjustments of 20 mm were built into the beam bearings, no adjustments have been required after twenty years of operation. A new plant was constructed to manufacture the concrete beams for the Shanghai Maglev which used cast-in-place substructure construction.

Hon. Bates questioned why rates for concrete have increased greatly over the past few years. Mr. Billow stated that the demand for concrete has increased significantly as well as the price of steel and scrap that is imported from China.

#### 4.4 Transrapid Update

Reed Tanger, Transrapid International-USA, Inc. presented an update on Transrapid's projects in Shanghai, China and Munich, Germany. Mr. Tanger provided members with background information on the Shanghai and Munich Maglev systems. Both of these projects focus around airport connections.



A video of the Shanghai Maglev system was presented which illustrated the 19-mile long route which connects the financial district to the international airport and reaches 267 miles per hour which is the peak speed on every run. This route takes approximately 60 minutes via taxi. The commissioning process for the Shanghai system was transferred fully to the Chinese in April 2004. Ridership is now over ten million and the accumulated distance traveled is over 2 million miles. The technical availability or on time departure and on time arrival is at 99.9%. The Shanghai system was designed based on the demand that the area would have over the next ten to twenty years.

Photographs were also shown of United States Secretary of Transportation, Peters riding the Shanghai system yesterday. She provided positive feedback on her experience.

There are two phases of extension being planned. The first is an additional 21-miles through the 2010 World Expo site, through the Shanghai South Railway Station, and up to the domestic airport. The goal is to have this up and running by 2010. An additional 100-mile extension is also planned.

Munich is also planning an airport connection from the central station in downtown with the city's international airport in Munich. The 23-mile system is expected to have an operating speed of 217 miles per hour with a trip time of about 10 minutes. Construction is expected to begin at the end of this year or early 2008. Technical enhancements have also been made to the vehicle as a result of the Shanghai experience.

Hon. Bates questioned the cost competitiveness of the Maglev technology with steel-based technology. Mr. Tanger stated that capital costs are comparable to high speed rail. He added that alignment flexibility is one main advantage for a Maglev system because it can go up steep grades and tighter curves, requiring less structure such as tunneling. For urban use, Tanger said, Maglev has the flexibility to get over a highway overpass, which high-speed rail doesn't have. Alignment may not be an option for HSR. The overall theme is that you have a lot of flexibility.

Hon. Lou Bone, Chair asked if the Shanghai Maglev system contains an on-board cab car or engine similar to that on the Metrolink system. Mr. Tanger stated that there is no locomotive on the vehicle therefore there is no need for a driver or engineer to be on board.

Mr. Marcus, SCAG, asked how the Bush Administration's non-support of Maglev would impact future Maglev development within the United States. Mr. Tanger answered that prior to the U.S. Secretary of Transportation's Shanghai visit, Secretary Peters mentioned that there were a few projects being federally supported to develop Maglev. Mr.

Marcus also asked how the recent record-breaking speed of 357 miles per hour that was attained by the French TGV high-speed rail system competes with Maglev. Regarding the French TGV record, Mr. Tanger addressed the special circumstances by which the top speed was attained. Most importantly, Tanger said, unlike Maglev the TGV system took many miles to arrive at this speed. He said Maglev can travel at this speed within a few seconds at much lower energy consumption rates, lower maintenance costs, and at much lower noise levels. Maglev revenue service would not go this speed, Tanger said, because of passenger comfort.

It was requested of Mr. Marcus to send a link of the TGV speed record to Task Force members.

**5. OPEN DISCUSSION**

There were no discussion items.

**6. CHAIR'S REPORT**

There were no items to report.

**7. NEXT MEETING**

Hon. Lou Bone, adjourned at 12:01 pm. The next meeting of the Maglev Task Force will be held at SCAG's Los Angeles office on May 10, 2007.



# MEMO

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**DATE:** May 10, 2007  
**TO:** Maglev Task Force  
**FROM:** Richard Marcus, Manager Maglev Program - SCAG  
**SUBJECT:** High-Speed Regional Transport Business Plan

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## **BACKGROUND:**

As part of the High Speed Regional Transport (HSRT) system design effort, IBI Group has been working with SCAG staff in developing a business plan approach to financing the high-speed regional system. The HSRT system builds on the effort completed by the Initial Operating Segment and examines an expansion of the system to include access to San Bernardino, Palmdale and San Pedro Bay Ports. Coverage of the HSRT to these locations would allow the system to address the needs of passenger, aviation and goods movement in the regional and tap into the potential business and revenue opportunities.

David Chow, Director at the IBI Group, will provide an overview of the HSRT concept and preliminary financial results. His presentation will include the purpose and need of the system, a summary of the HSRT system including costs and operating plan, approach to financial analysis and summary of results. Details will be provided on the three core businesses identified in the plan: passenger, aviation and goods movement.

# MEMO

**DATE:** May 10, 2007  
**TO:** Maglev Task Force  
**FROM:** Richard Marcus, Manager Maglev Program - SCAG  
**SUBJECT:** West Los Angeles Multi-Modal Transit Facility Study

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## BACKGROUND:

SCAG determined that, as transit services continue to multiply and expand on the west side of Los Angeles, the region should examine the possibilities, costs, impacts and benefits of a transit “hub” somewhere in the area. A consulting team began work in mid-2006 to undertake this work.

Work completed thus far includes:

- Establish Project Development Team
- Identify list of other stakeholders
- Interact with stakeholders on locations, connecting services, joint development, possible impacts, etc.
- Confirm policies and evaluation criteria
- Establish Facility Site Study Plan
- Transportation documents and data
- Land use and transit policies
- Public transit services (existing and planned)
- Socio-economic, travel demand and economic data
- List major land use development projects in the planning stage
- List major transportation project that might affect the potential Facility sites
- Informational Database, including all significant collected information
- Site requirements
- Site alternatives
- General traffic impacts
- Possible right-of-way impacts
- General facility layouts

# MEMO

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Work currently underway includes:

- Community impacts
- Continued stakeholder interaction and documentation of stakeholder meetings
- Possible refinements to the site or facility plan due to stakeholder input or possible impacts
- Options to alter site locations
- Options to alter general facility layouts and contents at each site

At previous Maglev Task Force meetings, February 2007, the most feasible sites were discussed, including:

- Alternative 1 – The vicinity of I-405 and the Wilshire Boulevard intersection
- Alternative 2 – The vicinity of I-405 and the Pico/Exposition intersection

Alternative development options were also presented. They include:

- Traditional development (Transit Oriented Development – TOD) with all parking located at the Transfer Facility, and may include some joint development activities.
- Decentralized development option with very limited parking at the Transfer Facility, and limited joint development that would only serve passenger needs. Parking required for the functionality of the site would be dispersed or scattered to nearby areas that could accommodate additional traffic movements. The remote parking facilities could be linked with the Transfer Facility with a people-mover system.

Mr. Frank Sherkow, Executive Vice President and CFO, of Southstar Engineering will present the status of this project, which is due to be completed by June 30, 2007.